





UNITED STATES ENVIRONMENTAL PROTECTION AGENČ REGION IX LABORATORY 1337 S. 46TH STREET

BLDG. 201 RICHMOND, CA 94804-4698

OCT 2 0 1999

MEMORANDUM

SUBJECT: C

Case R99R10

Results for Perchlorate Analysis

FROM:

Brenda Bettencourt, Director

Region 9 Laboratory (PMD-2)

TO:

Kathy Baylor, Hydrogeologist

RCRA Corrective Action Office (WST-5)

Attached are the report narrative and results spreadsheet for data from the analysis of water samples from the Simi Valley RCRA project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy. Summary information for the data included in this report is as follows:

SITE/PROJECT:

Simi Valley

CASE:

R99R10

SAMPLE DELIVERY GROUPS:

99270A

LABORATORY:

U. S. EPA Region 9 Laboratory

ANALYSES:

Perchlorate (Region 9 Laboratory SOP 531)

A full documentation package for these data, incl. ding raw data and sample custody documentation, has been prepared and sent to the Quality Assurance Program (PMD-3). Please contact Vance Fong for information regarding review and/or validation of the data.

If you have any questions please contact Rich Bauer at (510) 412-2312, or Ken Hendrix at (510) 412-2325.

ATTACHMENT: Analytical Report

USEPA REGION 9 LABORATORY REPORT NARRATIVE

CASE NUMBER: R99R10 SAMPLE DELIVERY GROUP: 99270A PROGRAM: RCRA

DOCUMENT CONTROL #: ESTW-9B-2585

DATE: 10/18/99

ANALYSIS: PERCHLORATE AND TOTAL DISSOLVED

SOLIDS

SAMPLE NUMBERS:

SAMPLE ID LABORATORY SAMPLE ID

 SIMVL1
 AB24209

 SIMVL2
 AB24210

 SIMVL3
 AB24211

GENERAL COMMENTS

Three water samples were received from the Simi Valley (Rocketdyne) RCRA project on 09/27/99.

The requested analysis was perchlorate following Region 9 Laboratory SOP 531 and total dissolved solids following EPA Method 160.1. All samples were analyzed within the required holding times.

SAMPLE RECEIPT AND PRESERVATION

The samples were received at 17°C and all custody seals were intact. No other shipping or preservation issues were encountered with these samples.

QA/QC SUMMARY

Laboratory Reagent Blanks (LRB)

A laboratory reagent blank is laboratory reagent water or baked sand with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. The laboratory reagent blank is used to determine the level of contamination introduced by the laboratory during analysis.

No analytes were detected in the blanks associated with this SDG.

Laboratory Fortified Matrix Spike (LFM) and Laboratory Duplicate Analysis (QC Sample: SIMVL1)

The laboratory fortified matrix spike sample and laboratory duplicate analyses provide information about the effect of the sample matrix on sample preparation and measurement. Poor percent recovery (%R) results and large relative percent difference (RPD) between duplicates may indicate inconsistent laboratory technique, sample nonhomogeneity in soils, or matrix effects which may interfere with analysis.

The QC sample was spiked with 5 ug/L perchlorate and 25 ug/L perchlorate. Both LFM recoveries for perchlorate were within the QC limits. The TDS RPD was less than or equal to the 20% QC limit. For perchlorate, both the sample and duplicate were less than the QL and no RPD was calculated.

Laboratory Fortified Blank (LFB) Analysis

The laboratory fortified blank is laboratory reagent water or baked sand with a known concentration of the analytes of interest added by the laboratory with all reagents added and carried through the same sample preparation and analytical procedures as the field samples. Poor percent recovery (%R) results may indicate inconsistent laboratory technique.

All LFB recoveries were within the QC limits.

Questions concerning the data can be answered by Patrick Hirata at (510) 412-2354.

USEPA REGION 9 LABORATORY QUALIFIER DEFINITIONS FOR INORGANIC SAMPLE RESULTS

- U The analyte was analyzed for, but was not detected above one half the Quantitation Limit (QL). The reported value is the QL for all analytes.
- **J** The reported value is an estimated quantity.
- N LFM sample recovery not within control limits. The reported value is estimated because the LFM recovery result did not meet the 75-125% criteria for accuracy. The result is considered quantitatively uncertain. The LFM analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.
- * Duplicate analysis not within control limits. Duplicated analyses demonstrate the analytical precision obtained for each sample matrix. The result is estimated and considered quantitatively uncertain. The imprecision between duplicate results may be due to sample non-homogeneity for soil sample, high levels of solids in the sample for water samples, inconsistent laboratory technique, or method defects.

EPA REGION 9 LABORATORY-RICHMOND, CA SUMMARY OF ANALYTICAL RESULTS

Case Number:

R99R10

Analysis:

Perchlorate and TDS

Site:

Simi Valley

Matrix:

Water

SDG: Date:

99270A

10/05/99

Date:	10/03/33								
Sample No.	N/A	1 (N/A		N/A		N/A		Quantitation
Sample I.D.	SIMVL1		SIMVL2		SIMVL3		Reagent Blank	1	Limit
Lab Sample I.D.	AB24209		AB24210		AB24211		N/A·		N/A
Date of Collection	09/23/99		09/23/99		09/23/99		N/A		N/A
Analyte	Result	Q	Result	Q	Result	Q	Result	Q	Result
Perchlorate (units of ug/L)	5	U	5	บ	5	U	5	U	5
Total Dissolved Solids (units of mg/L)	1300		1300		20	U	20	บ	20

Q - Laboratory Data Qualifiers; Refer to EPA Region 9 Laboratory Qualifier Definitions

Filename: 99270AG.WK4